

Work Order ID 140969

Tuesday, January 26, 2016 3:16:58 PM

647.1402
B 140969

140969

Page 1

Item ID: 647.1402

REV. A

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Lower Cutter Assembly

Stop

NS2

Start Date: 1/26/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 1/26/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: ML5

Date: JAN 28 2016

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.1400	REV A

110 Pick Kit 0.00

110

Packaging

Memo

0.00

Packaging

JAN 28 2016

DAS

6

9-89

120

120

Small Fab

Memo

0.00

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note 2.

A/R RTV LOCTITE 598:

exp. date: 08/17

M13343C

2x

16/01/29

DAS

36

9-89

130

130

QC

Memo

0.00

Quality Control

QC5- Inspect part completeness to step on W/O

(2)

DAS

38

9-89

FEB 04 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

Work Order ID 140969***140969***

Page 2

Tuesday, January 26, 2016 3:16:58 PM

Item ID: 647.1402 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Lower Cutter Assembly
Start Date: 1/26/2016 Start Qty: 2.00 *2* Cust Item ID:
Required Date: 1/26/2016 Req'd Qty: 2.00 *2* Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location <u>CC1046</u>	0.00							
140						2			
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***							FEB 01 2016	
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							
Quality Control									

MCS FEB 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Tuesday, January 26, 2016 3:16:57 PM

Page 1

Work Order ID: 140969

140969

Parent Item: 647.1402

647 1402

Parent Item Name: Lower Cutter Assembly

Start Date: 1/26/2016

Required Date: 1/26/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.10.04 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.9701		Manufactured	No				Each	3.0000		2			
646 9701									**				DAS
Cutter Sub Assembly													6
													9-89

Location	Loc Qty	Loc Code
cck012	3	
127684	1	
138414	2	

NAS1149FN832P

Purchased

No

Each

3,795.000

12

NAS1149FN832P

Washer

DAS

6

9-89

Location	Loc Qty	Loc Code
GA	2231	
M133316	16	
M133769	2215	
ST262	1564	
M133709	1564	

MS27039-08-19

Purchased

No

Each

1,127.000

6

MS27039-08-19

Screw

DAS

6

9-89

Location	Loc Qty	Loc Code
GA	106	
m132930	84	
m133077	22	
over006	896	
m133483	296	
m134063	600	
ST277	125	
m133769	125	

JAN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		☐ OTHER : _____			

Picklist Print

Tuesday, January 26, 2016 3:16:57 PM

Page 2

Work Order ID: 140969

140969

Parent Item: 647.1402

647 1402

Parent Item Name: Lower Cutter Assembly

Start Date: 1/26/2016

Required Date: 1/26/2016

Start Qty: 2.00

Required Qty: 2.00

MS21042L08

Purchased

No

Each

2,158.000

6

MS21042L 08

Nut

Location

Loc Qty

Loc Code

CA

101

m129682

101

GA

3

m133134

3

OVER007

1000

m134063

1000

ST303

1011

m133483

29

m133922

982

ST304

43

m128401

32

m131317

11

647.1501

Manufactured

No

Each

0.0000

2

647 1501

Lower Deflector Assembly

124241

DAS

6

9.89

JAN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

APICAL

INDUSTRIES, INC

ENGINEERING CHANGE NOTICE NO. 03911

SHEET 1 OF 1

DWG NO. 647.1400

REV: N/C

PREPARED
BY:

J. BECKER

DATE: 06/07/13

EFFECT ON DWG
☒ INC. ☐ UNINC.

DWG TITLE: CUTTER ASSY

APPROVED BY:

ENGR

MFG

QC

EFF:

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETEREASON: ADDED CONFIGURATION 647.1403 AND INCORPORATED
ECN 02962SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENTWITHOUT NOTICE
WORK ORDER

NO 140969 MLS

16-01-28

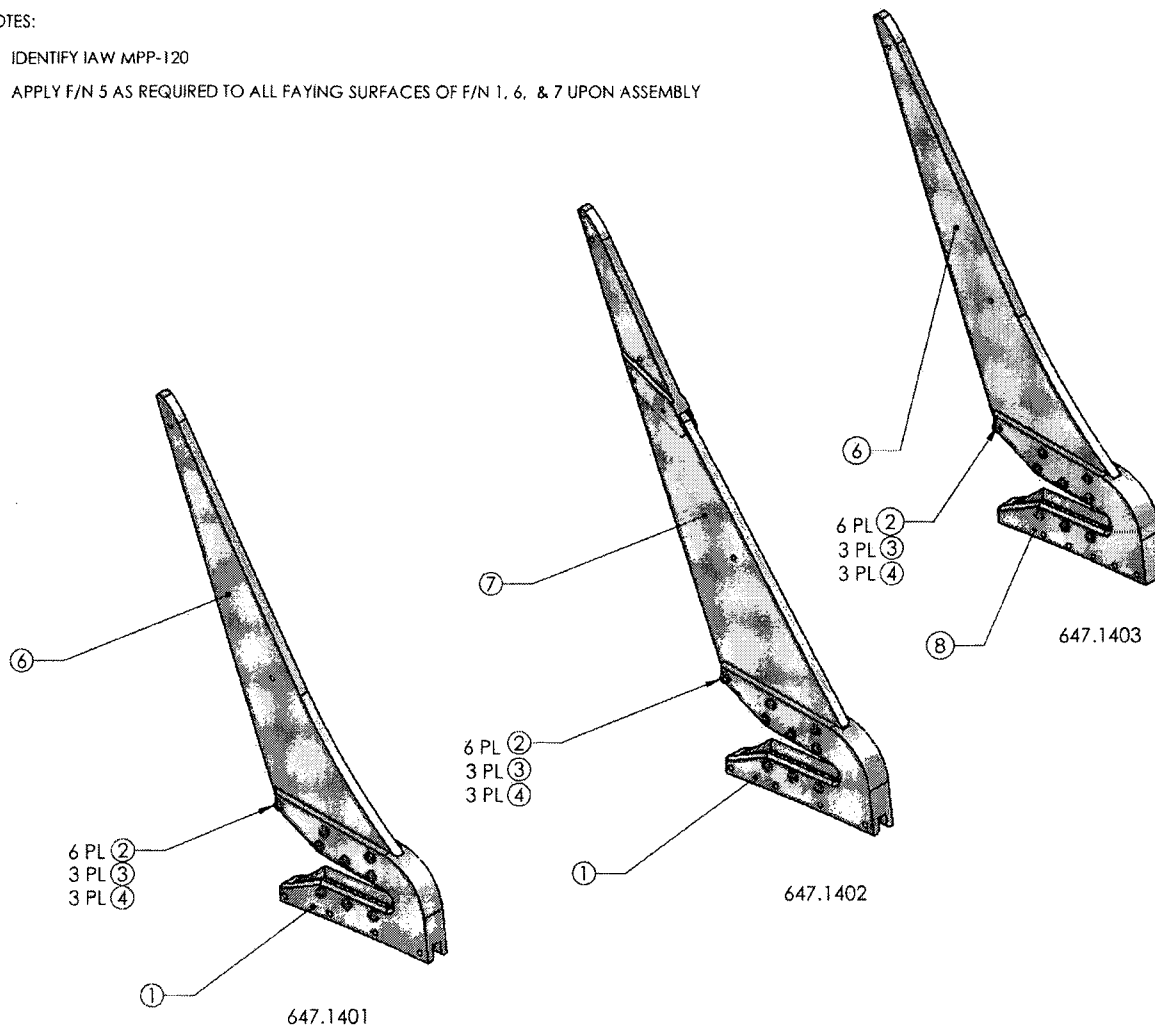
8	A	646.9702	1			CUTTER SUB ASSY (U CHANNEL)		
6	R	647.1510	1		1	UPPER DEFLECTOR		
5	R	601.2045	A/R	A/R	A/R	RTV, LOCTITE 598		
4	R	601.1541	3	3	3	NUT	MS21042L08	
3	R	601.2765	3	3	3	SCREW	MS27039-0819	
2	R	601.2764	6	6	6	WASHER	NAS1149FN832P	
	C	647.1403	☒			CUTTER ASSY (UPPER U CHANNEL)		
F/N	TC	PART NUMBER	1403	1402	1401	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY					
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ MDL ☐ INSTALL INSTRU ☐ ICA ☒ BOM						☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

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NOTES:

1. IDENTIFY IAW MPP-120
2. APPLY F/N 5 AS REQUIRED TO ALL FAYING SURFACES OF F/N 1, 6, & 7 UPON ASSEMBLY

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: P81		H/C
H/C	INITIAL RELEASE	08/15/09	P. BRAVO
A	INCORPORATED ECN'S 00942 & 00911	05/07/13	P. BRAVO



1		8	646.9702	CUTTER SUB ASSY (U CHANNEL)		
	1	7	647.1501	LOWER DEFLECTOR ASSY		
1		6	647.1510	UPPER DEFLECTOR		
A/R	A/R	A/R	5	601.2045	RTV, LOCTITE 598	
3	3	3	4	601.1541	NUT	MS21042L08
3	3	3	3	601.2765	SCREW	MS2039-0819
6	6	6	2	601.2764	WASHER	NAS1149FN832P
	1	1	1	646.9701	CUTTER SUB ASSY	
				647.1403	CUTTER ASSY (UPPER U CHANNEL)	
				647.1402	CUTTER ASSY (LOWER)	
				647.1401	CUTTER ASSY (UPPER)	
.1403	.1402	.1401	FIND #	PART #	DESCRIPTION	MAT'L SPEC.

QTY		PARTS LIST	
NEXT ASSY (S)		ORIGINAL DATE: 08-15-09	
647.1300		DRAWN BY: J. GARDNER	
		DRAWN BY: P. BRAVO	
		DRAWN BY: P. BRAVO	
		CONTRACT NO.	
		UNLESS OTHERWISE SPECIFIED	
		DIMENSIONS ARE IN INCHES	
		TOLERANCES ARE:	
		2 PLACE DECIMALS ± .010	
		3 PLACE DECIMALS ± .005	
		ANGLES ± .5°	
		APICAL INDUSTRIES	
		2608 TEMPLE HEIGHTS DR.	
		OCEANSIDE, CA. 92056-3512 (760)724-5300	
		CUTTER ASSY	
		SIZE: 07M26	
		DWG NO: 647.1400	
		SCALE: NONE	
		SHEET 1 OF 1	